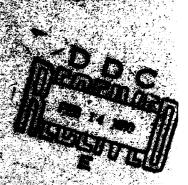


AD A O 8 O 8 4 8



Benefit Seulblit, Loper

SC ETTO

UNCLASSIFIED

REPORT DOCUMENTATION		READ INSTRUCTIONS REPORE COMPLETING FOR
the man day of	1 BOUT ACCUSSIO	H HO. S. MESINIENALS SYAVEOR HAMPEN
TRI-TR-79-8		
· TITLE TONE SUBSTITIET	The second secon	The section of the con-
The Leadership Evaluation Program (LEAP), Economic F		, =
Report.	PARICITITY	1 Jan 78 - 31 Jul
The second secon	and the second s	
AUTHORIO)		TOURNACE ON SWARF HUMBERS
Thomas D. Arrourtie	,	(4) manana na a man
		M00027-78-0-0048
PERFORNING ORGANIEAVION NAME AND ADDR		ANEAS WOME UNIT NUMBERS
Interaction Research Inst	itute, Inc.	1 25 5 4.33
4428 Rockcrest Drive Fairfax, Virginia 22030		1R1-201
TOTTION THE THE AND AUDRESS		IF REGERT DATE
Headquarters, U.S. Marine	Согря	√ July 1079
(Coder MPH)	-	11 HUMBER OF FREET
Washington, D.C. 20180	Men han Controlling off	iral TB BECURITY CLASS (of this report)
		Unclassified
(12)	68/	
`		BE BEST YELLS FALSH BEARING HE
Approved for public relea		
Approved for public relea		
Approved for public releasing the second of REY BORDS (Continue on reverse side if necessary	ared in Mark Sh. If different in the state of the state o	nt from Paprort
Approved for public releases in superson and tracesses and	and infinitely by their many thank many their th	ni from Reports Ite Ceasibility
Approved for public releader continuation statement on the absence on the supplementant notes. I supplementant notes REV WORDS Continue on reverse side if necessaring the address of the supplementant of the address of the supplementant of the address of the address of the supplementant of the address of the address of the supplementant of	e and infanish to block mi Received Commen Over a no	nthum Reports Index If Ceasibility Id evaluation sational development
Teadership Evaluation and Analysis Program (LEAP)	e and infanish to block mi Received Commen Over a no	nthon Reports ite feagibility id evaluation gational development
Approved for public releader management of the second of t	e and identife he block ma Reconcus Comman Organi Intera	nthon Reports It feasibility Id evaluation sational development cetion inventory (cont
Approved for public releader management on the supplementant notes REV WORDS Combine on cores size if necessary Leadership Evaluation and Analysis Program (LEAP) Leadership (management	e and inhantife he black ma Recurrent Comman Organi Intera	ntern Reports It fearibility Id evaluation Rational development Iction inventory (continue)
Approved for public releases of the cosesses of the public releases the supplementary notes. REV WORDS Continue on reverse side if necesses Leadership Evaluation and Analysis Program (LMAP) Leadership (management development)	e and intentit to thick me Keenicm Comman Organi Intera determine the ion and Analy	nton it feasibility id evaluation sational development etion inventory (cont economic feasibility sis Program (ERAP).
Approved for public releader minution statement minution statement minute abover minutes are worked in the season Leadership Evaluation and Analysis Program (LEAP) Leadership management development A study was conducted to of the Leadership Evaluat Data were collected on Ma	e and intentite to block me Econom Comman Organi Intera determine the ion and Analy Fine Corpa or illity of the	noted the fearibility of the program.

19. (cont'd)

Motivational assessment Performance criteria

Survey-guided intervention

20. (cont'd)

identifying organizational deficiencies, planning intervention, and evaluating outcomes. The data reveal significant correlations between increased LEAP scores and both higher reenlistment rates and lower absenteeism. Moreover, the LEAP was instrumental in improving command production rates and upgrading combat readiness. Case histories of LEAP applicability in various situations are also described.

Comparisons between the LEAF approach and other methodologies were discussed. It was concluded that the decentralized, self-development strategy represents the best potential for cost-beneficial outcomes and for maintaining command confidentiality and self-reliance. However, while the LEAP is a sound organizational investment for the Marine Corps, in order to realize its full potential, the program requires sufficient support at the policy-making level.

Acces	sion For	
MTIS DOC T	GRABI AB	-
í	owiced Figure 100	
Ву		
Distr	ibution/.	
_Aval	lability	
Dist	Availander, special	
A		

THE LEADERSHIP EVALUATION AND ANALYSIS PROGRAM (LEAP)

Economic Feasibility Report

Thomas D. Affourtit

Prepared for:
U.S. Department of the Navy
Headquarters, U.S. Marine Corps (Code: MPR)
Washington, D.C. 20380

Interaction Research Institute, Inc. 4428 Rockcrest Drive Fairfax, Virginia 22030

Summary

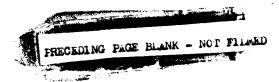
A study was conducted to determine the economic feasibility of the Leadership Evaluation and Analysis Program (LEAP). Several sources of information were analyzed. Data were collected on Marine Corps commands to establish the concurrent and predictive validity of the Interaction Inventory scales in relation to Leadership Analysis Form indices. Unauthorized absenteeism and reenlistment rates within participating commands were used as criteria.

In addition, several pre-post measures of LEAP intervention were calculated, focusing on motivational outcomes and unit production. Finally, a number of case histories depicting various intervention styles for using LEAP materials were described.

The results demonstrate the economic feasibility of the LEAP as a resource for the small unit commander in identifying organizational deficiencies, planning intervention, and evaluating outcomes. The LEAP indices are a valid reflection of unit motivation and performance. The data reveal significant correlations between increased LEAP scores and both higher reenlistments and lower absenteeism. Moreover, the LEAP has been instrumental in improving command production rates and upgrading combat readiness. Evidence of the applicability of LEAP materials in various situations was also provided.

Comparisons between the LEAP approach and methodologies used by other military services were discussed. The decentralized, self-development strategy represents the best potential for cost-beneficial outcomes and for maintaining command confidentiality and self-reliance. However, several drawbacks are apparent, such as limited data access and the lack of large-scale evaluation feedback to the user unit. A procedure was outlined for a direct data input and retrieval system that generates common solutions to Marine Corps concerns and produces leadership/management training material while maintaining unit anonymity.

It was concluded that the LEAP is a sound organizational investment for the Marine Corps. Through adequate support at the policy-making level, Marine commanders can be guided toward substantial savings in manpower retention, efficiency, and utilization. While material incentives are often used to attract personnel and to promote professionalism in the military, not enough emphasis is placed on intrinsic organizational and motivational variables. The latter represents a more rational, durable, and economical approach toward maintaining effective military strength.



Contents

																								1	ege?
Summa	ry.		•	•	•	,		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	iii
Intro	ducti	lon	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
	Purpo	se irou	nd	•	•	•		•	•	•	•	•	•	•			•						•		2 3
Metho			•																						4
	Proce	edur	е.	•	•			•	•	•	•	•	•	•		•	•	•		•	•		•		6
Resul	ts.								•	•.	•	•									•	•	•		8
	Concu	ırre	nt	P	eri	Eor	me	no	ce	V	ali	id:	ity	7	•	•	:	٠.				•	•	•	8
		Mot	bs	en	te	eis	3 M	(1	JA)	•		•	•	•	•	•	•		•	•	•		•	8
		Dia Mot	Ďs	en	te	eis	3M	(1	JA)	•							•		•	•	•	•	•	10
			lat	es						•			•											•	15 18
	Pre-1		•		-																•	•			21
		Con																		•	•	•	•	•	21 22
	Case	His	to	ri	88				•	•				•	•					•		•		•	26
		Cas	e	Hi	вtо	ory	, :	ı.			ntı													•	26
		Cas	e	Hi	sta	orī	7	2.			leç ası														28 29
		Cas	e	Hi	sto	ors	7 4	١.		Re	orç	jai	ni:	zat	tic	מכ	•	•	•	•	•	•	•	•	31 35
		Cas								In	lf. Ve:	st:	igi	at:	Loi	n I	r	C	88	3	•	•	•	•	36
		Cas									tal or													•	38 40
		Cas									ve:													•	42
	Disc	158	.on	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	44
	Conc	Lusi	.on	\$	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	50
	Dafa.																								E 1

List of Tables

Table		Page
1	Correlation Coefficients for LEAP Scale Scores and Unauthorized Absence	9
2	Correlation Coefficients for Disparity Indices and Unauthorized Absence	12
3	Correlation Coefficients for LEAP Scale Scores and Reenlistment Rates	15
4	Correlation Coefficients for Disparity Indices and Reenlistment Rates	18
5	Comparison of Two Survey Periods for LEAP Interaction Inventory Scale Scores	22
6	LEAP Scale Scores for Three Periods of Application	23
7	Comparison of Production Change Between Experimental and Control Groups	25
	List of Figures	
Figure		
1	The Relationship Between Motivational Scores and Personnel Performance for a 2-Month Period Minority Discrimination: UA	. 11
2	The Relationship Between Motivational Scores and Personnel Performance for a 2-Month Period Command Preparedness Disparity: UA	13
3	The Relationship Between Motivational Scores	
J	and Personnel Performance for a 2-Month Period Disparity LQ: UA	14
4	The Relationship Between Motivational Scores and Personnel Performance for a 3-Month Period Cohesion: Reenlistment	16
5	The Relationship Between Motivational Scores and Personnel Performance for a 3-Month	17

Figure				Page
6	The Relationship Between Motivational Scores and Personnel Performance for a 3-Month Period Justice Disparity: Reenlistment.	•	•	19
7	The Relationship Between Motivational Scores and Personnel Performance for a 3-Month Period Equality Disparity: Reenlistment	•	•	20
8	LEAP Network Monitor System			47

Introduction

In an increasingly cost-conscious atmosphere, proponents of government-supported programs have felt considerable pressure to justify expenditures through appropriate economic analysis. Interest in evaluating investments is especially pronounced for many of the organizational development programs enthusiastically launched in recent years, since the stated aims of these efforts were to improve institutional efficiency and effectiveness.

In January 1978, the Army began a major evaluation project to determine the value of their Organizational Efficiency program in terms of command climate and various performance indicators. This research effort is destined to continue for several additional years before a final conclusion is reached (Blades, 1978; O'Mara, 1979). The funding for this evaluation project is expected to reach \$250 thousand.

The Air Force has been involved in several evaluation projects of their many-faceted organizational development (OD) program. In the summer of 1977, the Air Force Institute of Technology was tasked with evaluating the impact of a team development program on the Air Force Research and Development Laboratory. A data base was established in January 1978, and additional measurements are planned for 1979 and 1980 (Stahl, Manley, & McNichols, 1978). In addition, continuing reports on the experimental effects of the Air Force job enrichment workshops (begun in 1974) are being produced in the hope of justifying the high cost of such intervention (Umstot, 1978).

Since 1975 the Navy Personnel Research and Development Center has been attempting a variety of pre- and post-experimental measures to assess the effects of Human Resource Management Cycle intervention aboard Navy ships (Mumford, 1976). Planned future evaluation research on the Navy's OD program includes attention to a long list of potential moderating variables (Thomas, 1978).

The results of these evaluation projects will provide practitioners and administrators alike with valuable insight into investment benefits and provide an opportunity to improve, reinforce, or correct existing programs as well as develop more cost-effective approaches toward upgrading military efficiency.

Purpose

The purpose of this report is to provide some evidence of the value of the Marine Corps' Leadership Evaluation and Analysis Program (LEAP) to the user and to estimate the potential cost-benefit outcomes that can be expected as a result of command intervention using the LEAP techniques. Unlike the experimentally designed, large-scale, and longitudinal evaluation projects implemented by the other military branches, this effort represents a small segment (1.8 man-months) of a 24.4 man-month contract which was primarily awarded to implement and further develop the LEAP.

While no systematic, controlled, economic analysis was staged, the data for this report was gathered from pilot projects and on an ad hoc, voluntary basis from LEAP practitioners. The data were analyzed to generate descriptions of LEAP applications, predictive performance outcomes, and the results of several pre-post measures from which cost-benefit inferences will be drawn. This report will outline the potential benefits of LEAP intervention on a broad basis and determine several cost ratios from available data.

The rationale for this study is based on the premise that evaluation data should be produced as an integral part of program development, and such results should be included as an essential aspect of any program that is supplied to a potential user. In this regard, the results of this report represent a data base and a framework for future systematic evaluation projects.

Background

The Leadership Evaluation and Analysis Program (LEAP) is designed to provide small unit commanders with the techniques and procedure by which they can assess leadership concerns, determine the level of unit combat readiness, and evaluate the effectiveness of the decision-making process. Decision-making feedback, through periodic application of the LEAP, aids the leader in developing the flexibility necessary to control and influence various groups under a variety of situations and mission requirements. The expertise and confidence acquired from this process during the preparation stage of military activity enable the leader to function more effectively during a time of crisis.

management theory and behavioral science methodology. However, unlike other programs of this type, the LEAP offers a decentralized, self-development strategy. The program is designed for use solely at the company, battery, and squadron levels. Command control and confidentiality are maintained, since the entire program is self-applied, and there is no need for professional assistance to conduct the program or to interpret the results. More ver, program application is voluntary, thereby eliminating report requirements and other administrative burdens.

The LEAP procedure involves the measurement of leadership based on operationally defined performance criteria and assessment of command motivation. Two principal techniques are used:

- The Leadership Analysis Form (LAF). A recording process that generates a quantitative measure of standard leadership performance. The LAF is also adaptable to command-specific performance requirements.
- The Interaction Inventory. A personnel survey instrument that yields a command motivational profile in terms of a number of unit issues and conditions.

The LEAP is presented in a programmed manual and was supplied to all potential user commands. The LEAP Manual, Volume I (Affourtit, 1977a), provides unit commanders with a sequential step-by-step procedure for the application of the techniques and explicit guidelines for the scoring, recording, and interpretation of results.

Method

The fundamental question of any cost-benefit evaluation project is: Is the "cost" or investment in terms of time, energy, and funds greater than, equal to, or less than the intended outcome? To answer this question adequately, a clear definition of goals and a sufficient accounting of expenditures in all areas are necessary.

Most organizational development programs in the military involve the use of professional consultants as intervention experts who diagnose various organizational deficiencies and then attempt to produce change through implementation of some management process or technique. Generally, the entire intervention procedure represents an expenditure toward the primary goal of improving organizational climate and/or performance. In most cases, the cost of the intervention procedure (including consultant fees, training cost, equipment, etc.) must be balanced against actual outcomes over time. Proper evaluation requires a full accounting over an extended period, and the systematic use of control groups to eliminate the effects of intervening variables that may produce alternate plausible conclusions for the results.

In the case of the LEAP, however, the OD process is decentralized to the unit commander, who functions as the intervention specialist by utilizing the techniques and instructions provided to identify conditions requiring attention. The LEAP was designed as a diagnostic tool, the sole

purpose of which is to identify pertinent command problem areas and evaluate outcomes in terms of motivational and performance criteria. There is no guarantee that the commander who applies the program will take corrective action or that any action taken by the commander will produce positive outcomes. Furthermore, any effort expended on the part of the commander (whether using the LEAP or some other process) is considered a function of the position to which he or she is assigned, i.e., accomplishing the unit mission through appropriate leadership/management behavior in conformance with organizational standards. The LEAP is based on the premise that, given proper materials, unit commanders can be more effective intervention specialists than an outside consultant. Therefore, specialists or consultant fees need not be calculated as an expenditure.

At the same time, if command performance improves after a LEAP application, the LEAP process can only be considered instrumental to the outcome -- a functional but not a direct cause for the effect. However, while the LEAP cannot be justified by outcome variables, certain assumptions can be made concerning LEAP utilization. First, commanders who are interested in improving unit conditions must be properly quided toward appropriate corrective action. Without accurate recognition of unit problem areas, commanders can do little to correct them. Proper identification is essential for planning corrective intervention and accurate feedback is necessary for evaluating outcomes and determining solutions. If the LEAP does not in itself change the situation, the process should accurately reflect the situation and thereby direct the commander to deficiencies as well as strong points within the unit. Armed with proper diagnostic information, the commander can take action to improve unit conditions.

Furthermore, while many commanders are generally aware of morale and performance deficiencies within their units,

there is a tendency to project blame on external factors as causation, such as the unit's location, deployment status, and societal conditions. By accurately linking performance to conditions and issues within the unit, commanders will be motivated to take corrective action. The commander realizes that many aspects of unit morale and performance can be controlled and influenced internally, and the individual in charge has the capability to do so to a great extent. In this case, the LEAP functions as a catalyst for command intervention and positive change.

Any cost-benefit analysis of the LEAP must be concerned with the degree to which the techniques supplied to the commander represent a valid and rational guide. The basic evaluation questions then are:

 Can the instruments contained in the LEAP assist the commander in producing a more efficient and effective unit?

and

 What benefits can be identified or assessed through LEAP intervention?

Once the accuracy of the LEAP techniques is determined, certain assumptions can be made about the influence utilization has on positive outcomes.

Procedure

There are several ways to determine the accuracy and authenticity of evaluation techniques. One approach is to conduct a series of reliability and validity measures during the development stages and after implementation on a test group. These measures include factor analysis, internal consistency and reliability estimates, and item discriminability tests. The results of these measures provide evidence of construct and content validity that represent estimates of

internal test validity. The LEAP survey technique, the Interaction Inventory, has been subjected to an ongoing internal validation process (Affourtit, 1978a, 1978c, 1979) and has satisfied all the criteria recommended by the American Psychological Association (1974).

Another method of determining technique authenticity is to concentrate on concurrent and predictive validity estimates of a technique which are more closely related to cost-benefit analysis. This report will focus on such validation measures and show the relationship between LEAP motivational scores and actual performance outcomes which, in turn, will be used to calculate cost estimates.

In addition, a second part of this study will concentrate on several pre-post measures of commands that applied the LEAP over a specified period to determine changes that were identified in terms of motivation and performance criteria. Finally, several case histories of LEAP application will be described in order to outline the actual processes used by practitioners attempting to improve unit combat readiness/effectiveness.

The evidence presented in this report will allow officials to make judgments concerning the present and future value of the LEAP to the Marine Corps.

Results

Concurrent Performance Validity

The LEAP is comprised of two principal techniques, a command motivational measure and a unit performance assessment technique. The LEAP Manual provides instructions and guidelines for applying the techniques and through an inductive or deductive process, for making judgments and decisions that will reinforce, correct, or redirect command conditions that are directly related to unit combat readiness.

When the commander uses the LEAP to make judgments and decisions, the adequacy and effectiveness of the decision is directly related to the accuracy of the technique used. Once the validity or predictive value of the information provided by the LEAP is determined, estimates of outcomes, in terms of cost-benefit ratios, can be calculated. In this section, the criteria used to measure the external validity of the LEAP will be unauthorized absence and reenlistment rates within a sample of Marine Corps commands.

Motivational Scores and Unauthorized Absenteeism (UA)

UA rates were calculated for 11 company level commands that administered the LEAP Interaction Inventory during a pilot study. UA rates for each command were calculated on the basis of the number of individual Marines absent over a 24-hour period for 2 months, 1 month preceding and during the motivational survey. The total number of UA's for the entire period was divided by the average on-hand (O/B) figure for each command. The O/B figure was calculated as an average of the total number of personnel recorded on the unit's morning report for the 1st, 15th, and 30th of each month. The

¹ The procedure for calculating UA rates is given in Chapter 2, The Leadership Analysis Form, of the LEAR Manual.

combined LEAP Interaction Inventory scores for rank groups E-1 through E-5 were used to determine the motivational level of each command.

Table 1 shows the results of correlations between LEAP scale scores and UA rates for the participating commands. All of the correlations are in the expected direction, revealing a consistently negative relationship between measures of command motivation and absenteeism. Statistically significant relationships were found for the Command Cohesion and Minority Discrimination subscales and for the total Command Equality scale.

Table 1

Correlation Coefficients for

LEAP Scale Scores and Unauthorized Absence

LEAP Scales	Kendall (tau Coefficients
Command Preparedness	-,236
Command Efficiency	~, 164
Command Cohesion	4184
Command Equality	-, 3824
Minority Discrimination	-, 74644
Majority Discrimination	346
Intergroup Climate	236
Justice	-,200
Motivational LQ	346

Adopting a procedure described by Guilford and Fruchter (1973), a regression coefficient was calculated to translate the correlation ratios of Table 1 into numbers of UA's per

scale index for the entire sample. The first step in this procedure was to establish the average O/H figure for the sample commands. Next, using the variance of the UA rate and the motivational scale score along with the correlation coefficient of Table 1, the regression equation was applied. The results produced an index which was translated into actual numbers of UA's for each scale score increase or decrease for an average command of 200 during a 2-month period.

Figure 1 illustrates the calculated decrease in UA's in terms of personnel number for each corresponding increase in the Minority Discrimination scale score. A 1-point increase in this score is equivalent to 9.2% or 1.84 fewer UA's over a 2-month period. That is, improving the perceptual judgment of a command by 1 point, a commander can expect approximately 1 fewer UA each month. And, for a change of 4 points in the positive direction, a commander can expect 7.36 fewer UA's over a 2-month period. As motivational scale scores increase, corresponding UA's decrease and vice versa.

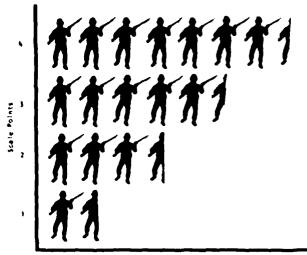
Disparity Measures and Unauthorized Absentecism (UA)

Analysis of the pilot study data revealed a very significant leadership dimension, the <u>Disparity Index (DI)</u> (Affourtit, 1977b). The DI was derived by measuring differences in item and scale scores between pertinent groups within a command, such as rank groups (E-5 and below vs. E-6 and above) and ethnic/racial groups (Minority vs. Majority). The calculations produced rank DI scores for the Command Preparedness scales and ethnic DI scores for the scales of the Command Equality factor. An overall Disparity Leadership Quotient was derived by combining the Command Preparedness and Command Equality DI scores.

²The average O/H figure for the sample commands was actually 188. However, to facilitate interpretation, UA results were projected onto a command of 200, representing the average Marine Corps company.

Figure 1

The Relationship Between Motivational Scores and Personnel Performance for a 2-Month Period Minority Discrimination: UA



Number of Personnel

The measure of disparity between pertinent groups may be as important, if not more important, an indicator of command motivation than the attained scale scores. The DI is actually a measure of unity and disunity within a command. If there is little disparity between rank groups but low scale scores, then all unit members recognize that conditions are not good, but they are bound by the fact that all are involved in the situation together, and that deficiencies can be improved through collective effort.

Using disparity as a criteria for predicting UA rates for the study command, the results as shown in Table 2 reveal that the Command Preparedness DI (rank) and the Disparity LQ (rank/ethnic) are significant at the .01 level of confidence, while the Command Efficiency and Cohesion subscales are significant at the .05 level.

Table 2

Correlation Coefficients for Disparity Indices and Unauthorized Absence

LEAP Disparity Indices	Pearson <u>r</u> Coefficients
Command Preparedness	.667**
Command Efficiency	.512*
Command Cohesion	.517*
Command Equality	.338
Minority Discrimination	. 492
Majority Discrimination	.053
Intergroup Climate	. 070
Justice	. 340
Disparity LQ	. 687**

Translating correlation ratios to expected outcomes, using the same procedure outlined above, it is possible to predict performance outcomes in terms of personnel behavior and disparity index change. In this case, a DI decrease represents

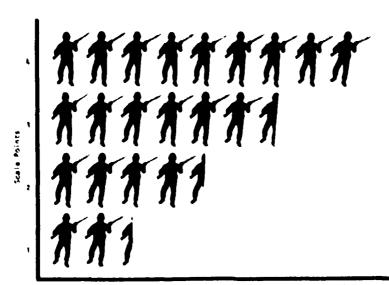
closing the motivational gap between groups of Marines within a command and thereby increasing agreement or unity.

Figure 2 provides a graphic representation for the estimated UA performance outcome for each point decrease on the Command Preparedness DI score. For each point improvement in the command (agreement between rank groups over the conditions measured), 2.25 fewer UA's can be expected over a 2-month period. A 4-point positive change would represent nine fewer UA's over the same period.

Figure 3 shows the expected change in UA rate for scale score differences in the overall Disparity LQ (i.e., agreement

Figure 2

The Relationship Between Motivational Scores and Personnel Performance for a 2-Month Period Command Preparedness Disparity: UA



Number of Personnel

between both rank and ethnic groups combined). For each point toward overall agreement, 3.49 fewer UA's can be predicted over a 2-month period for the average command of 200. A 4-point decrease in the DI LQ score would produce 13.96 fewer UA's over the same span of time.

Direct dollar costs for UA data are difficult to determine. A recent GAO report (1979) estimated costs for ANOL in the military to be \$220.8 million for fiscal year 1977, the latest year calculated. Compared to the other services, the Marine Corps, with proportionately higher ANOL rates, expended a larger percentage of its budget on absenteeism. The economic factors used in the GAO report included costs for reporting, apprehending, processing after return, courts-martial and non-judicial punishments, confinement, and recruiting and training

Figure 3

The Relationship Between Motivational Scores and Personnel Performance for a 2-Month Period

Disparity LQ : UA

Himber of Personnel

costs lost due to early separation. Costs were not developed for pretrial confinement or other nonproductive status, pay and benefits while in confinement (if sentence did not include forfeiture of pay), applicable costs of operating correctional custody facilities, review of courts-martial and appeals, processing early discharges, and costs of VA benefits granted offenders.

For the company level commander, absenteeism represents a number of economic losses, such as additional administrative duties, production and manpower decreases, and overall reduction in combat readiness status. And, in the more critical MOS fields where replacements are not readily available, the cost of UA may be considerably higher than in infantry units.

Motivational Scale Scores and Reenlistment Rates

The second performance criterion used to test the predictive value of the LEAP Interaction Inventory scales was command retention figures. Ten company level commands with at least 40% survey participation and at least two potential accessions were included in the analysis. First-term reenlistment rates for each command were calculated for a 3-month period (before, during, and after the motivational survey) by dividing the number of potential accessions into the number of actual reenlistments.

The results as presented in Table 3 show a consistently positive correlation between scale scores and reenlistment rates. While all the correlations are high for this size sample, reenlistments were significantly associated with the Command Cohesion and the Justice scales. That is, first-term reenlistments are significantly higher in those commands where

Table 3

Correlation Coefficients for LEAP Scale Scores and Reenlistment Rates

LEAP Scales	Kendall (tau) Coefficients
Command Preparedness	. 289
Command Efficiency	. 289
Command Cohesion	. 467*
Command Equality	. 333
Minority Discrimination	.333
Majority Discrimination	. 244
Intergroup Climate	.111
Justice	.511*
Motivational LQ	.333

^{*}p < .05

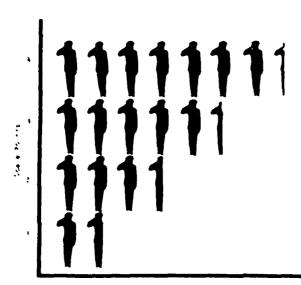
unit members perceive more cohesiveness and where they consider justice to be more positive as measured by the Interaction Inventory.

Using the same procedure described above for translating UA correlation ratios into expected performance rates, first-term reenlistment scores were calculated for the sample commands and projected onto an average command of 200. On the average, 12% of the Marines were available for reenlistment over the 3-month period, and slightly over 10% of those available (10.31%) reenlisted during the period studied. Applying the conversion formula for reenlistments, the results as presented in Figure 4 reveal the probable performance outcome for 1-point increases in LEAP Interaction Inventory scale scores over a 3-month period.

Figure 4

The Relationship Between Motivational Scores and Personnel Performance for a 3-Month Period

Cobesion: Recollistment



Hyperbear of Personnell

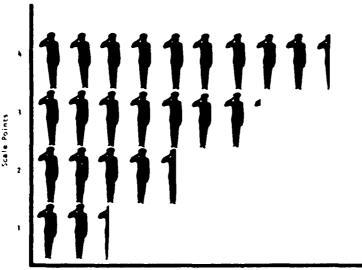
As Figure 4 illustrates, the potential increase in first-term reenlistments for each point increase on the Command Cohesion scale is 7.5% or 1.81 Marines over 3 months. A 4-point change toward more positive perception of Command Cohesion is equivalent to 7.5 more reenlistments for an average size command.

The expected response for eligible first-term reenlistees is even higher for comparable increases in the Justice scale as shown in Figure 5. Each point represents a 9.8% increase or 2.35 more Marines reenlisting in the Corps.

Figure 5

The Relationship Between Motivational Scores and Personnel Performance for a 3-Month Period

Justice: Reenlistment



Number of Personnel

Disparity Measures and Reenlistment Rates

Correlation ratios between measures of disparity (DI) and command retention rates were also computed in the same manner as accomplished for the UA data. As Table 4 reveals, while all correlation ratios are in the expected direction, DI measures are significantly associated with reenlistment rates for the overall Command Equality scale and for the Justice and Intergroup Climate scales. In other words, as disagreement or disunity between unit members over conditions of equality, justice, and tension decreases, the probability of reenlistment increases significantly.

Table 4

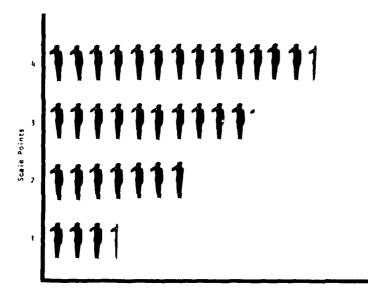
Correlation Coefficients for Disparity Indices and Reenlistment Rates

LEAP Disparity Indices	Pearson <u>r</u> Coefficients
Command Preparedness	060
Command Efficiency	114
Command Cohesion	269
Command Equality	~.737**
Minority Discrimination	501
Majority Discrimination	311
Intergroup Climate	548*
Justice	680**
Disparity LQ	433
*p < .05 **p < .01	

Again, converting the correlation ratios into expected performance outcomes, Figure 6 shows personnel reenlistment increases in response to disparity decrease over Justice conditions. A 1-point change toward more agreement between disparate groups within a command could produce 14% or 3.35 more reenlistments over 3 months for the average command.

Figure 6

The Relationship Between Motivational Scores and Personnel Performance for a 3-Month Period Justice Disparity: Reenlistment



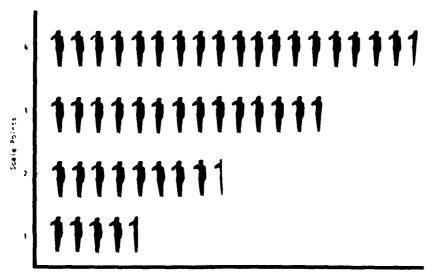
Number of Personnel

Figure 7 shows the corresponding reenlistment increase expected for respective decreases in each DI for the total Command Equality scale. Combining the disparity for the four Equality scales, for each point change toward unity a commander can predict a 19.2% or 4.6 increase in reenlistments over 3 months.

Figure 7

The Relationship Between Motivational Scores and Personnel Performance for a 3-Month Period

Equality Disparity: Reenlistment



Number of Personnel

In estimating actual cost-benefit for increased reenlistments, a number of variables must be considered, such as training and development expenditures, experience gained, and the costs for general shortages in the combat arms in terms of defense effectiveness.

Pre-Post Results

Since LEAP survey results represent a valid indicator of motivational conditions requiring command intervention, the same procedure can be used in evaluating any intervention process instituted to correct motivational deficiencies. The results of several commands that conducted pre-post measures of command motivation to help plan and then evaluate intervention procedures and offered their data are illustrative of the gains received.

Again, it is the action taken by the commander that produces the outcome. The LEAP techniques are considered as instrumental in guiding the commander toward establishing management objectives and for providing feedback concerning the effectiveness of whatever course of action is taken.

Command A

The first administration of the Interaction Inventory to Command A was in March 1978 and the second only 3 months later in June. The commander's first step was to compare the unit's results with a division cross-section sample published in a report (Affourtit, 1978b) and representing approximately 1/3 of the division. This initial reference point revealed that eight of the scales that comprise the unit's Motivational LQ were below division standard. Moreover, five of the eight Total Command scale scores were below the 50th percentile, indicating that the majority of Marines in the command perceived these conditions to be in a negative state.

Using the individual items as a guide, the commander took immediate action to further investigate and correct motivational deficiencies. The second survey showed an increase in scale values above the division standard on all but two of the primary scales. Moreover, the differences in motivational scores between the two periods of assessment revealed

improvements on all scales which were significant on seven of the nine primary scales of the Interaction Inventory for the Total Command. Table 5 shows the LEAP results for the two periods of evaluation.

Table 5

Comparison of Two Survey Periods
for LEAP Interaction Inventory Scale Scores

		Scale Scores	
Scale	Survey 1	Survey 2	Division
Command Preparedness	39.6	49.6***	48.4
Command Efficiency	33.6	46.1***	45.2
Command Cohesion	45.7	53.1**	51.5
Command Equality	52.6	61.3**	61.7
Minority Discrimination	63.8	67.0	66.7
Majority Discrimination	50.2	58.6	64.4
Intergroup Climate	53.1	61.3*	60.6
Justice	43.3	58.3***	55.2
Motivational LQ	46.1	55.4***	55.0

*p < .05 **p < .01 **p < .001

Using the performance probability measures developed in the previous section, the increased scores for Command A represent a considerable savings for the Marine Corps.

Command B

The first LEAP Interaction Inventory was administered to members of Command B over a 1-month period. Since the unit was somewhat unique, there was no standard with which to compare

motivational results. The unit commander, however, took some immediate steps to improve conditions by attacking those issues that (a) scored beneath the 50th percentile and (b) were considered most critical to the operational efficiency of the unit.

A second survey was conducted several months later. The feedback was used to reinforce certain courses of action, to realign several priorities, and to adjust some procedures and objectives. A third motivational survey conducted six months after the second revealed marked improvement over all of the LEAP indicators with seven of the 10 scales measured increasing to a significant level. Table 6 shows the results of the three survey periods and identifies the areas of significant change.

Table 6

LEAP Scale Scores
for Three Periods of Application

LEAP	Scores								
Scales	Period 1	Period 2	Period 3						
Command Preparedness	49.6	49.5	55.6**						
Command Efficiency	48.6	47.6	53.8*						
Command Cohesion	50.6	51.3	57.5**						
Command Equality	65.3	67.6	69.3*						
Minority Discrimination	73.3	77.2	76.1						
Majority Discrimination	66.7	67.3	69.3						
Intergroup Climate	66.8	71.0	73.2**						
Justice	54.2	55.0	58.6						
Motivational LQ	57.2	58.5	62.5**						
Program Evaluation	47.1	58.1***	60.5***						

 $^{^{*}p} < .05$ $^{**p} < .01$ $^{**p} < .001$

It is interesting to note that the Program Evaluation scale showed an immediate and progressively significant increase over the period studied. The program being evaluated in this case was the formalized process the commander used to address some of the problems identified by the LEAP survey and to outline corrective procedures being implemented. The program allowed unit members to impact on policy decisions. And, scale ratings communicated to the commander that his efforts were supported by participants.

Since Command B is an aviation maintenance unit, it was possible to show contiguous motivational and performance increases using actual production criteria. With the commander's permission, several appropriate performance measures were extracted from the automated COMNAVAIRPAC AIMD Component Production Feedback Reports (1978a, 1978b, 1979a, 1979b). In addition, three other aviation maintenance commands, selected for their similarity to Command B as matched control groups, were used to compare production change over the period studied.

Table 7 shows the production change for four pertinent performance criteria over the period covered by the LEAP survey for Command B and the experimental control groups. The production criteria were selected to reflect trouble-shooting capability, quality of repair, production rates, logistical planning, and overall unit morale and efficiency.

As Table 7 reveals, all but one of the production indices showed an improvement over the study period. However, all but one of the control groups' production rates declined over the same period. Further, the degree of improvement for Command B was statistically significant when compared to the

³Data were collected four four quarterly reports, one quarter immediately preceding LEAP intervention and continuing to a final quarter covering one full year of operation.

control groups. And, in one area where Command B's production decreased, the comparison groups' performance also declined but to a greater degree, the difference between the experimental and control groups reaching the .20 level of significance.

Table 7

Comparison of Production Change
Between Experimental and Control Groups

	Mean Change			
Performance Variable	Command B	Control Groups	T Score	Significance Level
No Defect Rate	2.70	-0.23	4.60	. 02
Awaiting Maintenance	2.60	-2.03	11.14	.01
Awaiting Parts	9.80	1.33	13.32	.001
% Ready for Issue of Inventory	-0.90	-2.90	1.19	.20

In other words, considering environmental factors, such as personnel turnover, location, and seasonal influences, Command B's production rates improved with improved LEAP motivational scores, and production improvement was significantly greater than similarly designed commands over the same period. Where production decline was noted for Command B, a greater mean decline was found for the comparison commands.

These results further establish the concurrent and predictive validity of the LEAP motivational scales and illustrate practical utility of the LEAP methodology in supporting command production improvement.

Case Histories

Since the LEAP is a leadership/management aid at the disposal of the unit commander, the individual leader must derive direct benefit from application of the techniques that comprise the program. Therefore, the unit commander can be considered the ultimate judge of the utility and true value of the program. Moreover, the information obtained from a LEAP survey can be utilized in a number of ways depending on the commander's personal style of leadership/management and the particular conditions identified by the technique. The case studies that follow describe the details of several different applications and represent the endorsements of several commanders who used the LEAP process as an aid in the context of a command intervention.

Case History 1. Controlled Open Forum

During one Interaction Inventory survey, a recently arrived infantry company commander announced to his unit that he would post the results in the squad bay for all members to review. Unit members were initially skeptical, although platoon leaders were in favor of any method toward improving the poor record of the command. The SNCO's and troops were cautious about endorsing the process, but the approach conveyed a sense of openness and communicated immediately to unit members that the new CO was interested in doing something about their concerns.

Once the results were returned and posted, bimonthly meetings were held with officers and staff NCO's during which they would address selected problem areas, determine the accuracy of command perceptions, brainstorm arbitrary and complex issues, gather facts to support or refute perceptual judgments, and develop potential solutions for improving conditions. This exercise also allowed the senior members to acknowledge the points of view of the junior members of the unit.

As pertinent issues were clarified and recommended courses of action were outlined, the CO and senior members addressed the entire command (usually once a month) on a particular issue or series of issues. Input from other members of the unit was solicited, hard evidence of conditions was displayed by the leadership, and recommended courses of action were presented by the company commander.

The initial effect of the process was a diminished disparity between seniors and subordinates in the command; that is, the process itself increased group solidarity. Troop involvement in correcting deficiencies was encouraged, but the seniors maintained control of the situation by selecting the issues and preparing to meet disagreements or differences in perception logically and factually.

In some cases, the leaders identified a problem area and described a solution already initiated to diffuse a potential reaction and eliminate further skepticism. In instances where troops had misjudged a condition or misperceived a company policy, the leaders were prepared to present the "facts" concerning, for example, disciplinary procedures, duty assignments, or promotion policies. The command gatherings were brief, relevant, positive, and to the point.

Knowledge of the critical issues and preparation for meetings made the leaders more confident when addressing the troops, and the process avoided the potential loss of control that can occur when groups try to communicate from different points of view. When an issue that was not prepared for surfaced, the leaders clarified and recorded it for response at the next meeting.

According to the CO, the insight gained from the anonymous survey comments also made him aware of particular areas of troop dissatisfaction and misjudgment. This information made him adapt his approach to the command in order to offset or diffuse the effects of misperceptions. For example, since

most unit members considered discipline to be capricious and arbitrary, during officer hours defendents now received a full explanation of the disciplinary measures taken and some rationale as to why punishment may be different for someone else committing the same infraction. Promotions also were awarded with more explanation of the specific factors that led to the award in each case.

Case History 2. Delegation of Authority

An aviation maintenance commander with a rather large differentiated unit, consisting of approximately 22% Navy personnel, reviewed the results of a LEAP survey and found the indicators a thoroughly accurate reflection of his own estimate of the situation. He then circled those areas and issues he felt required priority attention and discussed each at a meeting with his officers and section heads.

With some general quidance, he directed each section head to deal with the issues identified by delegating responsibility down their respective chains of command, and to especially exercise junior leaders (NCO's) in reviewing, investigating, and correcting any discrepancies uncovered. He requested informal periodic feedback concerning the outcome of any unit intervention, as well as recommendations and suggestions from members participating in organization improvement projects. The commander also modified the required "Leadership" program to suit unit needs and to cover command essential topics identified by the LEAP survey.

Several months later another survey was administered. This time unit members were more enthusiastic about the process and about the potential progress the approach could bring. Improvements were noted in most motivational areas, particularly in closing the perceptual gap between senior and subordinate members of the command. The section leaders met again and were informed they were on the right track and to

continue as directed. The positive feedback had a catalytic effect on the subordinate leaders also, as they realized their efforts were paying off and were being recognized by the CO.

Six months later, a third survey was administered. The results were particularly revealing. Scores increased significantly (beyond chance variation) in all but one of the motivational areas measured. Performance measures also improved since the first survey; repair rates, turnaround time, and no-defect rates improved significantly compared to similar commands.

In consideration of the mission and organization of his unit, the commander in this case functioned primarily as a manager or director rather than a unit leader. He utilized modern organizational techniques, investigated problems, gathered facts, developed policies as needed, and then delegated authority to subordinate leaders. He provided support and position power to junior supervisors and thereby exercised developing leaders/managers and promoted positive transition of authority when the time for rotation occurs.

Case History 3. Classic Approach

After administering the LEAP questionnaire to his entire command, an H&HS squadron commander prepared a formalized report of his unit's survey results. He grouped the data according to logical and mission-oriented categories for the total command and for the two rank groups, E-5 and below and E-6 and above. In this manner, he identified the most critical areas of concern (lowest scores) and specific issues within the categories of organization, communications, and morale.

The commander published his list of problem areas and established a study group composed of selected officers and enlisted members to further investigate each condition and to design a solution/action program for review. With the survey

results as a guide, the study group uncovered numerous instances where appropriate action would improve the motivational level of the unit. Check-in and administrative procedures created a poor first impression for newcomers; sick bay procedures were annoying and inefficient; intra-squadron (section) planning and activity were practically nonexistent; command functioning was considered fragmentary, diffuse, and isolated; many Marines did not understand barracks requirements, monitary limits, or how to deal with local and personal problems.

Two chains of command were apparently operating, one for officers and one for enlisted. As a result, communication was not consistent or timely, and complaints came from both sectors. Moreover, enlisted Marines in the command generally felt their accomplishments were not recognized, punishment was considered unfair, and members did not seem to understand the difference between rights, responsibilities, and privileges. Generally, the troops saw a large gap between themselves and the officers. Leaders were seen to abuse the privileges afforded them and they did not seem to understand or be concerned about subordinate problems.

Corrective actions and solutions were rapidly established and published formally with a full description of the action to be taken, the decisions made, and the target date or goal to be reached. Some modifications were structural, some represented changes in process, others involved creating educational programs. For example, the squadron office was moved to a more central location to facilitate the check-in process and to avoid loss of important paperwork; the "buddy system" was established for newcomers; and a thorough indoctrination program was implemented.

To improve communication flow, lower level staff meetings were established; NCOIC's were included once a month at the CO's weekly conference; the base paper and department/section

newsletters were utilized to further inform members about personal, local, and organizational matters; periodic intersection "field trips" were promoted to broaden the appreciation of unit members in other duty sections and to generate group pride. To improve general morale and unit identification, field days and family days were planned by enlisted committees, and individual section achievement awards were initiated and publicly presented.

Finally, a leadership training program was organized to include pertinent command concerns. Half the time allotted for training was conducted for separate rank groups (officer, SNCO, NCO, non-rated) and covered relevant concrete subject areas, such as rights, privileges, and responsibilities of Marines, principles of counselling, and briefing techniques. In addition, critical unit issues identified by the survey were broached by separate rank groups and addressed during the second stage of training which included all ranks combined. A primary goal established for this program was to prepare officers, SNCO's, and NCO's to effectively answer questions concerning command organization and structure, promotion systems and command policies, record book entries and fitness reports, UCMJ, NJP, request mast procedures, and military courtesy, etc.

The entire process was recorded and produced in a formal report along with briefing aids and charts that monitored progress. Resurveys were planned periodically to obtain feedback on decision-making effectiveness. The report was voluntarily submitted up the chain of command for the purpose of sharing the experience and findings and to outline potential solutions for other commanders in the area.

Case History 4. Reorganization

Shortly after taking command of a somewhat hybrid engineering support company, the new commander realized that

conditions in the unit were not as good as they appeared on the surface. According to the records, however, maintenance levels were maintained, equipment was functional, spare parts were available, repair rates were steady and efficient, etc.

On the troop morale side, UA's were down as were article 15's, and requests mast did not reveal any major problem areas. On paper, the command looked well organized and proficient.

Yet, the commander quickly detected that the records were not quite accurate. Vehicles would not start; equipment failed to function properly; key staff NCO's and other unit members were not readily available to respond to mishaps. Beyond that, responsibility seemed to be diffused; grumbling and excuses among unit members were rampant; even the coffee mess was unkempt and disorganized.

A thorough investigation of the command revealed a Pandora's box of problem areas. The CO discovered that complaints from units the company was supporting were usually rejected as unsound or excused as negligence on the user's part. Communication lines between units and sections were unstructured and disorganized. Commands frequently had to use informal channels or other means to obtain support and or equipment. Often one SNCO would handle requests from several sources insufficiently, while those supposedly responsible for action were not available.

The records concerning equipment combat readiness did not accurately reflect the situation. The unit was a long way from ready; many of the problems that were not included in standard reports were forgotten or disregarded and remained unattended. Accordingly, repair rates and equipment viability were not exactly falsified on the records, they were "estimated."

Results of the LEAP survey revealed that Marines below E-6 had little respect for or confidence in the leaders. They felt they could not communicate up the chain of command,

SNCO's were uncaring about their personal and job situations, and they were sufficiently dissatisfied with their assignments (70.6% stated they would rather serve in another unit). The NCO's were particularly dismayed about not being supported and not given responsibility. No one cared about their jobs. Since missing muster or coming late for work was easily excused (and often not officially reported), the offense was committed frequently without fear of disciplinary action, a condition no one really complained about. Of course, legitimate complaints, such as requests mast, were generally left unresolved or rejected, which made troops reluctant or cynical about getting involved or making problems known to commanders.

The most revealing analysis was given in the Time-in-Unit breakdown of the LEAP survey results. New arrivals to the command were generally highly motivated, in fact, the group with less than 3 months in the command had higher motivational scores than the E-6's and E-7's. After 3 months in the unit, however, the motivational level plummeted and remained low until members left the unit. At the 3-month point, the novelty of the experience seemed to wear off. Troops realized that the command was not representative of the Marine Corps they joined, and they became aware that responsibility on the job meant little support from above or personal guidance when needed.

The staff and officers, on the other hand, saw all ranks below them as unmotivated, although they felt that communication, support, and response to subordinate Marines (E-5 and below) were much more adequate than the troops estimated. In short, the command was not functioning well, and the true situation was reflected through accurate assessment of unit performance and motivation.

The commander's problem was twofold. He had to convince his seniors that the efficiency and morale problems that now "surfaced" were not his doing. As the problems emerged officially, the commander had an additional problem of explaining how the present increased inefficiency, higher UA rates, and article 15's were part of the solution rather than the problem itself. Secondly, the commander had to get approval for a complete reorganization of the unit utilizing modern organizational development practices.

The commander eventually received approval and went to work establishing visual charts indicating actual work accomplished, repair rates, etc. Objectives or goals were also established and progress was measured on a daily weekly basic for all unit members to see. The lines of communication were corrected by creating a Maintenance Control Center through which all message traffic was received, recorded, and tracked. Motivational and morale problems were systematically addressed. Section heads were briefed together and individually as warranted on the initial survey results. Policy changes considered necessary to modify perceptions and improve conditions were implemented.

The process and structural changes eventually had a positive impact on the command. Equipment was functionally upgraded; deadline items were tracked efficiently; spare parts were ready or on order. The CO also displayed, for the benefit of both troops and senior commanders who visited the unit, before-and-after charts indicating the degree and rate of improvement over time.

An Interaction Inventory resurvey revealed that troops had developed more pride in their unit. A renewed sense of professional competence and achievement was now apparent. Unit cohesion also increased as SNCO's developed a better

Inhis situation illustrates an important point where efficient management can uncover problems previously hidden or unrecognized. Reflecting the true situation, performance and morale indicators may show an "apparent" decline. Furthermore, there may be an initial negative reaction toward change in any form until personnel adapt to the new routine.

appreciation for troops' problems and realized that leniency and unchallenging work neither improved morale nor afforded them respect.

Case History 5. Self-Awareness

A maintenance company commander suspected that one of his platoon leaders, a warrant officer, was promoting racial bias and thereby causing dissension between the minority and majority members in his section. There was no evidence he could put his finger on exactly: an attitude expressed by the WO, his demeaner toward certain Marines, and some casual comments made by Marines in the section.

Realizing a potential racial confrontation was browing, the CO summoned the officer and outlined the situation and his assessment of it. The warrant officer (a former gunnery sergeant with much more time in the Corps than the company commander) became defensive and denied any preferential or discriminatory treatment of members of his section. The WO questioned the CO's judgment by explaining he knew how to handle troops; the many years of successful service and rise in leadership position were proof of his capability. He explained that there were a few vocal malcontents in his platoon that were responsible for the CO's impression.

The Interaction Inventory was administered to the entire command but processed by duty section, since each platoon generally functioned separately from the others. This procedure also gave the company commander an opportunity to review his command as a whole unit as well as to analyze differences in conditions between the various duty sections.

The results were revealing insofar as perceptions of discrimination within each section were concerned. The Wo's section had a generally negative condition for minority discrimination as judged by both minority and majority member Marines. (Scores were below the 50th percentile, indicating

that most of the members of the section agreed that the situation was bad.) Most of the Marines in the duty section were aware of the WO's bias but could not effectively communicate the situation to him. Furthermore, other duty sections' results revealed no such negative judgments in the area of perceived discrimination.

With this evidence in hand, the company commander summoned the section leader for counselling, showed him the data, and directed him to explain how a couple of malcontents could produce such results. After the counselling, some of the staff NCO's and NCO's were gathered, and along with the CO and section leader reviewed the situation, analyzed duty rosters, assignments, and individual impressions, etc., and planned several courses of action toward modifying the conditions that produced the negative perceptions. The section leader did a lot of soul-searching and finally realized that he was treating Marines differently merely on the basis of color and modified his actions accordingly.

Case History 6. Investigation Process

An incident occurred between two groups of Marines in one command that resulted in one Marine's requiring medical attention for a knife wound. A formal investigation of the incident produced contradictory explanations and judgments about the events that led to the altercation and the probable cause. The outcome of the investigation did not conclusively reveal which group instigated the incident, whether the action was ethnically motivated, or who was actually involved. Several alternate theories were pieced together for the final report.

Realizing that witnesses, being liable for their testimony, were intimidated by the investigators and were pressured by peers to communicate accepted versions of the incident publicly, the CO administered the LEAP survey to the entire

command and requested verbatim comments about the incident as well as suggestions for improving relations between Marines in the command.

Unit members were able to communicate anonymously without fear of reprisal, and they were not reticent about expressing their opinions and suggestions. Further, the items in the questionnaire were structured to cover the full range of factors that represent standard concerns of Marines in a number of areas, including Intergroup Climate. The items helped respondents organize their thoughts and stimulated a number of verbatim comments in an effort to qualify the response categories of the Inventory. The activity also gave members a sense of involvement and unity in solving command problems.

The commander was able to elicit additional information about the incident to support or refute the theories generated by the formal hearing. Moreover, he could judge the degree of tension remaining between groups, systematically determine probable underlying causes, and establish a course of action designed to improve relevant conditions. The suggestions made by troops toward diffusing the situation were quite beneficial according to the commander.

A leadership lesson on how to avert future confrontations also emerged from the data. It seems that an NCO had the adversary groups under control before any actual contact was made. However, the NCO left the scene to get additional help in resolving the conflict and in dispersing the groups. In the absence of a responsible intermediary and the possibility of MP involvement heightening the emotions of the troops, the altereation occurred. Bad the NCO remained to maintain order and sent another Marine for additional support, the incident probably would not have escalated.

Case History 7. Establish Priorities

Upon assuming command of a unit just prior to a demanding tactical training exercise, a new CO administered the LEAP survey to his unit during the initial staging period. In preparation for taking command, the officer had previously reviewed the LEAP survey results of a division cross section and identified some general conditions and concerns that troops considered most critical. He also took note of those conditions that appeared most disparate between senior and junior Marines, i.e., the issues that showed the largest gaps between the two rank groups, such as information dissemination and command organization.

By administering the LEAP questionnaire himself, he was able to inform the unit that he wanted to begin his tour as CO by getting a fix on the primary concerns and issues that were important to unit members. Administration of the questionnaire immediately after his statement of intent made it clear to the unit that he was sincere in upgrading the morale and efficiency of the unit.

Realizing that the results would not be processed immediately, the CO strongly encouraged the troops to express their particular concerns in writing in the space provided on their Answer Forms. Upon reviewing trooper comments, he immediately gained an appreciation for key issues and priorities from the points of view of unit members.

The information he now possessed gave him substance with which to organize his priorities and establish goals for the unit. The information also helped confirm some initial impressions he had formed and aided in the interpretation of judgments he received informally from junior officers and key staff, most of which had slightly different priorities and perceptions about the command. He now had a balanced view of the command, and by knowing which judgments about trooper concerns were most accurate, he was able to determine some

measure of credibility among his subordinate leaders. He felt more confident about making decisions in preparation for the difficult exercise that the unit faced.

During the days of the tactical exercise, the commander, pressed with numerous demands and details that required immediate attention, forced himself to deal alternately with at least some of the concerns that the survey printout revealed as prominent among unit personnel -- issues that were considered to have been insufficiently addressed in the past. Even though the immediate tactical demands seemed more critical at the time, he realigned his priorities to allot some effort toward personnel issues -- issues that conventional wisdom dictated should be placed on the "back burner."

In addition, as he interacted with the troops during field exercises, rather than engaging primarily in small talk, he was able to take the initiative and communicate more directly with the troops on relevant issues, probe for further information, and solicit suggestions about upgrading unit climate.

The effect of the entire approach, according to the commander, was very positive. Admittedly, he normally would not have considered many of the conditions he dealt with during such a hectic schedule. But, the fact that he did utilize some of the time on issues the troops felt were personally important had a motivating effect on unit members. The unit performed an outstanding job during the exercise -- 100 percent training attendance during the entire period, no absenteeism, no one missing muster, good coordination between seniors and subordinates, and all duty watches responsibly carried out. The spirit and group solidarity expressed was officially noted by the senior training officer in an after-action report.

While the totality of leadership displayed by the CO deserves full credit for the outcome, the CO felt that adapting his priorities to include some key personnel issues

and the intelligent manner with which he was able to approach his troops were primarily responsible for gaining the confidence, respect, and response of the Marines in this new command.

Case History 8. Poor Communication

In an effort to identify some definitive causes for an inordinate number of UA's in his command, a reserve company commander administered the Interaction Inventory to his unit immediately following a weekend drill. After reviewing the results, the commander focused on the single most negatively perceived command issue (item statement) shown on the motivational profile. The commander reasoned that this issue was not only the most critical but the one about which unit members were most certain. He reasoned that this issue would be used by unit members as a premise to deduce a number of other negative conditions for which little evidence may be available.

According to the survey, most of the enlisted Marines in the unit considered the promotion system within the command to be unfair and discriminatory. Moreover, when the data were processed for minority and majority members, both groups saw racia! bias as a factor for advancement in rank. In this case, at least, one group had to be wrong.

Since the CO considered his promotion policy to be fair and conducted in accordance with Marine Corps policy, he was surprised by the results of the LEAP survey. Further inquiry into the allegation during the next drill revealed that the majority of the troops considered time-in-grade as the ultimate criterion for promotion. They did not fully understand how the promotion system worked, they could not calculate their individual composite scores, and many claimed they were unaware of a composite scoring system or standard promotion policy.

27

As a result of this misconception, whenever a black or white Marine received a promotion with less time-in-grade than another Marine of a different race, the group associated with the non-promoted Marine surmised that discrimination was the reason. Moreover, the commander's initial assumption was right, the certainty of the "evidence" of racial bias in promotion was the basis for a number of other misperceptions concerning discrimination in the command. The troops rationalized, excused, or filtered out any evidence contradicting their "theory" as an exception to the rule.

Since none of the Marines desired a racial confrontation, except for a few derogatory comments made within isolated groups, the issue of discrimination was never really discussed openly. Officers and key staff NCO's were generally unaware of the intensity of the situation and shrugged off comments overheard as meaningless. But, if resentment was not vocal, it was intense as indicated by the anonymous LEAP survey results.

The solution was simple. The CO quickly modified the training schedule to include a concentrated educational project. The morning of the next drill, he summoned his platoon commanders, First Sergeant, and company "gunny" and directed them to gather the enlisted Marines in small groups, and with individual record books in hand, explain precisely how the promotion system actually functions, and exactly what each individual had to accomplish before a promotion could be awarded.

This case is a good example of poor communication between the officers and enlisted members. The officers were certain that the troops had previously been informed about the promotion system, and they assumed troops understood why they were or were not promoted. However, whether they received a lecture or promotion while attached to the unit, were initially educated during recruit training, or were informally briefed during platoon formation, the fact remained that they did not understand the system, and their performance reflected a critical misjudgment of company policy.

The commanding officer took the stand that the officers and key SNCO's were not only responsible for communicating such information, but they were also responsible for assuring comprehension. Assuming information is absorbed by an audience merely because it was imparted does not guarantee the performance change for which the information was intended.

Case History 9. Developing Leadership

An Amphibious Assault Vehicle commander directed his platoon leaders to administer the LEAP survey to their respective sections. Each officer was required to develop motivational profiles for several different groups (by education, rank, ethnic, EAS, etc.) as an exercise in learning about the Marines that comprise the unit.

At an informal officers call, the leaders discussed their results from the standpoints of the different groups within the command. They identified common command weaknesses and attempted to induce reasons for certain trends that were peculiar to groups with different backgrounds or at different periods in their tours as Marines. The exercise was an attempt to analyze group motivation, understand expectations, and promote more flexibility in dealing with diverse groups. The company commander theorized that, while Marines are a generally homogenous group, there are important individual differences among Marines that, properly considered by leaders, could be instrumental in controlling and influencing their behavior. Considering individual differences actually promotes command solidarity and individual identification with unit goals.

The company commander felt that this exercise was not only beneficial in gaining knowledge about unit concerns and

priorities, but was also a valuable lesson in understanding the rationale behind various perceptions of Marines. Accordingly, the insight acquired from this exercise became a catalyst for positive and productive interaction between the leaders and the troops. Young officers became less reluctant to approach junior Marines in the unit. The leaders were able to address relevant matters with a group and on a one-to-one basis, generate rapport, and communicate more intelligently and rationally with unit members.

Although the self-scoring process was a tedious weekend chore, the young officers expressed the feeling that they had learned something that enhanced their value as leaders.

As these case histories illustrate, the information obtained from a LEAP survey can be addressed in any number of ways depending on the individual's approach to problem solving. The primary purpose of an intelligence-gathering technique like the LEAP is to gain control and influence over the group the leader was assigned to lead. In this respect, on a pragmatic level, the commander's philosophy or style of leadership is not a real consideration. Whether the leader is more disposed toward Machiavellian principles or espouses Jeffersonian concepts, he or she is more able to manipulate incentives or be guided by group desires (as the case may be) by having a firm understanding of the motivational orientation of the unit toward pertinent command issues.

Discussion

This study was conducted to determine the economic feasibility of the LEAP as an organizational development tool for the small unit commander. The data of the study focused on three primary cost-benefit considerations. First, the diagnostic capability of the LEAP techniques was established through validity estimates between LEAP scale scores and both absentee and reenlistment criteria using input from a sample of Marine Corps commands.

The second part of the evaluation concentrated on several pre-post measures of commands that utilized the LEAP to identify problem areas, effect positive change, and determine outcome variables. One command in the sample systematically monitored the effects of intervention and the results showed a significant improvement in both the motivational climate of the command and several performance efficiency indicators. Furthermore, the improvement was progressively higher than control group commands which showed no significant gain over the period studied.

Finally, the manner in which the LEAP was utilized by commanders in the context of various situations was explored. Case histories involving LEAP application provided general information about how the program functions to support the commander. The descriptions of field application also supplied endorsements of the LEAP method by field commanders.

The findings of this study demonstrate that the LEAP is a valid aid for the small unit commander that can be effectively utilized to diagnose conditions, plan intervention, and evaluate outcomes.

If an assessment technique is a valid reflection of unit readiness and proficiency, and if the unit commander is provided the guidelines and support necessary to apply the technique autonomously to evaluate command capability, then the commander can develop effective leadership/management procedures without the involvement of organizational consultants or intervention specialists. Similar organizational development programs implemented by the Army, Navy, and Air Force require the expertise of intervention specialists to function as conduits through which techniques are administered, results are interpreted, and goals are established.

The use of these experts necessitates economic justification which diminishes the cost-benefit impact of the entire effort. Moreover, additional management techniques acquired by the intervention specialists can also be imparted to the unit commander. A number of methods designed for producing process, structural, or psychological change can easily be acquired by field commanders through educational involvement or by programmed instruction texts like the LEAP Manual. If the same impact on organizational development can be achieved through a self-development methodology, then not only would government agencies realize a considerable savings in manpower expenditures, but most of the shortcomings of the "consultant" strategy would be eliminated, such as: loss of command confidentiality and diminished self-reliance on the part of the unit commander.

Another position posed by proponents of outside consultant assistance is that the unit commander lacks the objectivity to deal with conditions within his or her own command and, therefore, requires a specialist to identify weaknesses in the command structure. This notion is debunked by the intervention specialists themselves through further claims that those who avail themselves of the consultant's talents are left with sufficient insight to command effectively. Whatever magic is bestowed on those erstwhile bedazzled commanders to make them more perspicacious can be imparted en masse with considerably less expense. The fact is, the OD consultant represents an additional staff officer over the

T/O of the unit with a background in OD technology. Any additional staff help for an overburdened command will be welcomed and should produce a positive effect.

The principal drawback of the completely decentralized organizational development model is the inability to collect and process evaluation data. Such information can be analyzed to produce viable solutions for various command conditions. While the intervention specialist can serve this purpose, command data must be obtained voluntarily under the threat to unit confidentiality. Few commanders are willing to expose their "dirty laundry"; especially to a fellow officer who, "consultant" or not, is responsible to the higher command.

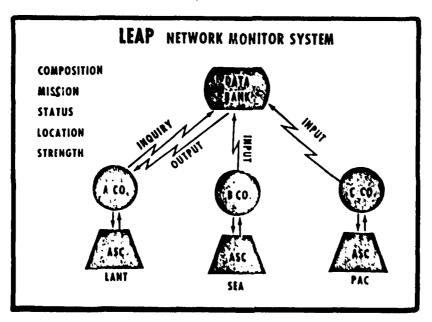
However, it may be possible to promote voluntary submission of command data through a centralized data bank while maintaining unit anonymity. The LEAP Network Monitor System (LNMS) is designed to function on a voluntary and anonymous basis as an information storage and retrieval data bank for field commanders.

Information input, recommendations, and solutions discovered can be analyzed, and data feedback can be presented in consideration of any number of influencing conditions, such as unit composition, mission, unit status, location, or effective strength. Figure 8 illustrates how the LNMS will operate.

As data is accumulated, the LNMS can be used as a resource center to monitor the effects of actual environmental and internal command conditions that influence combat readiness and to transmit common solutions to common Marine Corps problems. Such results, based on actual conditions, will also be beneficial in training new commanders to make the most appropriate and effective decisions prior to command assignment.

Furthermore, it is possible, through this system, to produce division, wing, and group level profiles without threat to the small unit commander. Such reports, based on

Figure 8



representative samples, can be used as a feedback mechanism for LEAP users providing a cross-section standard. Commanders can estimate their position with regard to conditions discovered on a large scale, and unit priorities and objectives based on levels actually achieved within the command can be established.

Division level reports provide input to senior commanders allowing them to deal with some of the problems that have an impact on company level performance, but that go beyond the small unit leader's realm of responsibility. To date a Marine Barracks and two division reports have been produced.

Concerning data collection and evaluation research, there is a wealth of information available in the Marine Corps for those who desire to claim it. Such information systematically retrieved and analyzed represents a valuable resource that can be translated into savings in time, energy, and funds. For example, it has been established that the LEAP can

effectively measure motivational differences in commands that produce higher reenlistment rates, promote significantly less absenteeism among personnel, and generate higher production, reduced error, and more quality output. The commands that are able to accomplish this, even under the most difficult of environmental influences, hold the key to successful contemporary leadership. And, those commands that function below the norm under controlled conditions also possess many lessons to learn.

Identifying motivational differences that separate the high from the low functioning commands is the first step toward discovering the actual operations that separate outstanding leaders from the marginal performers. These operations can be analyzed, defined, and communicated to other Marines in an effort to upgrade the performance of the Marine Corps substantially. Using the LEAP as an evaluation process to generate training material for Marine leaders at all levels is a rational second step for the program.

While the LEAP's greatest strength is its decentralized simplicity and independence from intervention specialists, the primary potential weakness lies at the central source of development, evaluation, and support. Such a decentralized strategy demands a highly technical and proficient supporting agent. A well-integrated systematic process of maintenance and management is necessary to diagnose difficulties and upgrade system components, facilitate communication links, and provide intelligent quidance to unit commanders and data-processing corollaries. Most important, a program like the LEAP needs a prime mover, a highly qualified professional to take full responsibility for all aspects of the project, down to the individual user, and to respond to practical, as well as scientific inquiries from within and outside the Corps.

Beyond the expertise required for basic maintenance of the LEAP are field requests for additional assessment materials, modified processing procedures, results concerning evaluated solutions, and acceptable designs for senior level application and large-scale OD projects. Instructional materials are also needed on basic organizational processes, leadership styles, and decision-making possibilities -- the contents of the organizational consultant's bag of tricks.

The LEAP is not a Utopian idea. Discovering ways to upgrade command efficiency is not a problem caused by a dearth of individual leadership material within the Marine Corps, nor is it hindered by the lack of a valid evaluation methodology. The difficulty lies in the efficiency of the bureaucratic decision-making process that is necessary to combine successful leadership with proven analytical techniques. The end result of this combination will be a rational training-development model for the benefit of present and future Marines.

The future course of the Marine Corps is clear. Corps must protect its initial investment and maximize its potential. The Corps must secure and build upon the foundation established by the LEAP and take the position as a model for other military services to follow. Lacking internal expertise and operating on a limited budget, the Corps must avoid the diffusion of responsibility and stagnation produced by a bureaucratic system of high-turnover billets in which proficient military persons are transformed into a parade of amateur technicians and inefficient bureaucrats. Small unit commanders require only limited central support to utilize the program properly as a leadership/management self-development strategy. Ignorance and neglect at the policy and support level are the greatest enemies of a program like the LEAP. The Marine Corps must not withdraw to the position of many central supporting agencies aptly described by Freud years ago -- "They conjure up an ugly picture of mills which grind so slowly that, before the flour is ready, men are dead of hunger" (1932).

Conclusion

The evidence presented in this study demonstrates that the LEAP is a viable program for commanders and a sound investment for the Marine Corps. The LEAP represents a cost-beneficial resource for the small unit commander in identifying organizational deficiencies, planning intervention, and evaluating outcomes. Many of the conditions that lead to absenteeism, reenlistment, and production efficiency can be controlled at the small unit level. Through proper application of the program, Marine commanders can be guided to produce substantial savings in manpower retention, efficiency, and utilization.

While material incentives are often used to attract personnel and to promote professionalism in the military, not enough emphasis is placed on intrinsic organizational and motivational variables. The latter represents a more rational, durable, and economical approach toward maintaining effective military strength.

However, proper support at the policy-making level is essential for the program to function efficiently. The Marine Corps cannot afford to take any position other than full support of the LEAP. Any alternative approach toward organizational development would be more costly, and no effort in this area would represent a considerable forfeiture of increased combat readiness.

References

- Affourtit, T.D. The Marine Corps' Leadership Evaluation and Analysis Program (LEAP) volume I: Manual for the Leadership Analysis Form and LEAP Interaction Inventory (NAVMC 2670). Washington, D.C.: Headquarters, U.S. Marine Corps, March 1977. (a)
- Affourtit, T.D. Contemporary Marine Corps leadership issues
 II: 2nd Marine Division, FMF (Technical Report 77-4).
 Fairfax, Va.: Interaction Research Institute, Inc.,
 April 1977. (b)
- Affourtit, T.D. The Leadership Evaluation and Analysis

 Program (LEAP) volume II: Development and validation
 of the Interaction Inventory (Technical Report 78-3).
 Fairfax, Va.: Interaction Research Institute, Inc.,
 April 1978. (a)
- Affourtit, T.D. Contemporary Marine Corps leadership issues
 III: The 1st Marine Division (Technical Report 78-8).
 Fairfax, Va.: Interaction Research Institute, Inc.,
 September 1978. (b)
- Affourtit, T.D. The Leadership Evaluation and Analysis
 Program (LEAP) volume II: Validation update (Technical
 Report 78-10). Fairfax, Va.: Interaction Research
 Institute, Inc., November 1978. (c)
- Affourtit, T.D. The Leadership Evaluation and Analysis
 Program (LEAP) volume II: Validation update (Technical
 Report 79-3). Fairfax, Va.: Interaction Research
 Institute, Inc., March 1979.
- Blades, J.W. Command climate. In R.T. Harris (Ed.),

 Proceedings of the Military Human Resource Management
 Symposium. Monterey, Calif.: Naval Postgraduate
 School, 1978.
- Commander Naval Air Force U.S. Pacific Fleet. Notice 4790:

 AIMD Intermediate 3-M data feedback report. San Diego,
 Ca.: July 1978.
- Commander Naval Air Force U.S. Pacific Fleet. Notice 4790:
 AIMD Intermediate 3-M data feedback report. San Diego,
 Ca.: October 1978.
- Commander Naval Air Force U.S. Pacific Fleet. Notice 4790:
 AIMD Intermediate 3-M data feedback report. San Diego,
 Ca.: January 1979.

- Commander Naval Air Force U.S. Pacific Fleet. Notice 4790:

 AIMD Intermediate 3-M data feedback report. San Diego,
 Ca.: February 1979.
- Freud, S. Collected papers. New York: Basic Books, 1959. (Originally published, 1932).
- General Accounting Office. AWOL in the military: A serious and costly problem, Report to the Congress by the Comptroller General of the United States. Washington, D.C.: U.S. General Accounting Office, 1979.
- Guilford, J.P., & Fruchter, B. <u>Fundamental statistics in psychology and education</u> (5th ed.). New York: McGraw-Hill, 1973.
- Mumford, S.J. Human resource management and operational readiness as measured by refresher training on Navy ships.

 San Diego: Navy Personnel Research & Development Center, February 1976.
- O'Mara, F.E. Command climate. Wave I. Technical report.
 Alexandria, Va.: Army Research Institute for the
 Behavioral and Social Sciences, 1979 (in press).
- Stahl, M.J., Manley, T.R., & McNicols, C.W. An assessment of team development at an Air Force Research and Development Laboratory. In R.T. Harris (Ed.), Proceedings of the Military Human Resources Management Symposium. Monterey, Calif.: Naval Postgraduate School, 1978.
- Standards for educational and psychological tests. Washington, D.C.: American Psychological Association, 1974.
- Thomas, E. <u>Human resource management cycle assessment</u>. Paper presented at the Military Human Resources Management Symposium, Monterey, Calif., October-November 1978.
- Umstot, D.D. Organizational development technology and the military: A surprising merger (working paper). Wright-Patterson AFB, Ohio: Air Force Institute of Technology, March 1978.